

IN THE CLAIMS

1. (Previously Presented) A singing voice-synthesizing method comprising:

inputting phonetic unit information representative of a phonetic unit, time information representative of a singing-starting time point, and singing length information representative of a singing length, in timing earlier than the singing-starting time point, for a singing phonetic unit including a sequence of a first phoneme and a second phoneme;

generating a phonetic unit transition time length formed by a generation time length of the first phoneme and a generation time length of the second phoneme, based on the inputted phonetic unit information;

determining a singing-starting time point and a singing duration time of the first phoneme and a singing-starting time point and a singing duration time of the second phoneme, based on the generated phonetic unit transition time length, the inputted time information and singing length information; and

starting generation of a first singing voice and a second singing voice formed by the first phoneme and the second phoneme at the singing-starting time point of the first phoneme and the singing-starting time point of the second phoneme, respectively, and continuing generation of the first singing voice and the second singing voice for the singing duration time of the first phoneme and the singing duration time of the second phoneme, respectively.

2. (Previously Presented) A singing voice-synthesizing method according to claim 1, wherein the determining includes setting the singing-starting time point of the first phoneme to a time point earlier than the singing-starting time point represented by the time information.

3. (Original) A singing voice-synthesizing apparatus comprising:

an input section that inputs phonetic unit information representative of a phonetic unit,

time information representative of a singing-starting time point, and singing length information representative of a singing length, in timing earlier than the singing-starting time point, for a phonetic unit including a sequence of a first phoneme and a second phoneme;

a storage section that stores a phonetic unit transition time length formed by a generation time length of the first phoneme and a generation time length of the second phoneme;

a readout section that reads out the phonetic unit transition time length from said storage section based on the phonetic unit information inputted by said input section;

a calculating section that calculates a singing-starting time point and a singing duration time of the first phoneme, and a singing-starting time point and a singing duration time of the second phoneme, based on the phonetic unit transition time length read by said readout section and the time information and the singing length information which have been inputted by said input section; and

a singing voice-synthesizing section that starts generation of a first singing voice and a second singing voice formed by the first phoneme and the second phoneme at the singing-starting time point of the first phoneme and the singing-starting time point of the second phoneme calculated by said calculating section, respectively, and continuing generation of the first singing voice and the second singing voice for the singing duration time of the first phoneme and the singing duration time of the second phoneme calculated by said calculating section, respectively.

4. (Original) A singing voice-synthesizing apparatus according to claim 3, wherein said input section inputs modifying information for modifying the generation time length of the first phoneme, and wherein said calculating section modifies the generation time length of the first phoneme in the phonetic unit transition time length read by said readout section according to the

modifying information inputted by said input section, and then calculates the singing-starting time point and the singing duration time of the first phoneme and the singing-starting time point and the singing duration time of the second phoneme, based on the phonetic unit transition time length including the modified generation time length of the first phoneme.

5. Canceled

6. Canceled

7. Canceled

8. Canceled

9. Canceled

10. Canceled

11. (Original) A storage medium storing a program for executing a singing voice-synthesizing method, the program comprising:

an input module that inputs phonetic unit information representative of a phonetic unit, time information representative of a singing-starting time point, and singing length information representative of a singing length, in timing earlier than the singing-starting time point, for a singing phonetic unit including a sequence of a first phoneme and a second phoneme;

a phonetic unit transition time length-generating module that generates a phonetic unit transition time length formed by a generation time length of the first phoneme and a generation time length of the second phoneme, based on the inputted phonetic unit information;

a determining module that determines a singing-starting time point and a singing duration time of the first phoneme and a singing-starting time point and a singing duration time of the second phoneme, based on the generated phonetic unit transition time length, the inputted time information and singing length information; and

a singing voice-generating module that starts generation of a first singing voice and a second singing voice formed by the first phoneme and the second phoneme at the singing-starting time point of the first phoneme and the singing-starting time point of the second phoneme, respectively, and continuing generation of the first singing voice and the second singing voice for the singing duration time of the first phoneme and the singing duration time of the second phoneme, respectively.

12. Canceled

13. (Previously Presented) A program code storage device comprising a storage medium and computer-readable program code, stored on said storage medium, having instructions which when executed cause:

inputting phonetic unit information representative of a phonetic unit, time information representative of a singing-starting time point, and singing length information representative of a singing length, in timing earlier than the singing-starting time point, for a singing phonetic unit including a sequence of a first phoneme and a second phoneme;

generating a phonetic unit transition time length formed by a generation time length of the first phoneme and a generation time length of the second phoneme, based on the inputted phonetic unit information;

determining a singing-starting time point and a singing duration time of the first phoneme and a singing-starting time point and a singing duration time of the second phoneme, based on the generated phonetic unit transition time length, the inputted time information and singing length information; and

initiating generation of a first singing voice and a second singing voice formed by the first phoneme and the second phoneme at the singing-starting time point of the first phoneme and

the singing-starting time point of the second phoneme, respectively, and continuing generation of the first singing voice and the second singing voice for the singing duration time of the first phoneme and the singing duration time of the second phoneme, respectively.

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